Graduate Program in Molecular Cell Biology:

Special Lecture/Course in: Translational Oncology I

Lecturer: Natalie Sampson, Martin Puhr, Julia Höfer, Georg Schäfer, Guido Wollmann

Number: 041538

Type: PR Semester hours: 2,0

Character: Laboratory Practical + introductory lecture

Time/Date: SS/part 1 (human tissue) 19-21st June, part 2 (mouse model) 26-28th June

Location: CCB + Division of Virology + Institute of Pathology (MUI)

Limited number of places YES, minimum 5, maximum 8, registration necessary YES

Please contact natalie.sampson@i-med.ac.at

Aim:

Provide an insight into different methods for addressing research questions related to translational oncology

Description/contents:

The course will be divided into 2 parts. In the first part (KW25, 3x 4-5 hours) a lecture style-introduction will provide the students with the technical background to the different methods included in the practical. Thereafter, in hands-on practical sessions the students will be shown how to archive, quality control and prepare surgical tumor tissue from patients. During the practical the students will also perform immunohistochemical detection of tumor markers and prognostic markers, imaging of human immunohistochemical stained tissues, construct a tissue microarray, isolate and culture primary human cells from biopsy material. In the second part (KW26, 2x 4-5 hours) following a one-hour method lecture, students will learn the following mouse tumor model procedures: establishing and measuring subcutaneous tumor models, i.v. and intratumoral treatment, luciferase life imaging, and stereotactic intracranial tumor grafting.

Suggested reading: